



# Washington Department of Fish and Wildlife

## Fish Passage & Diversion Screening Inventory Database Report Cover Sheet

The following report is extracted from the Washington Department of Fish and Wildlife's (WDFW) Fish Passage and Diversion Screening Inventory Database (FPDSI). WDFW makes every attempt to keep these reports in sync with FPDSI; however, the dynamic nature of the data and workflows associated with maintaining the database may result in short-term differences.

Users are encouraged to contact WDFW to discuss appropriate use of the data and how we can assist with fish passage barrier removal or inventory. Please visit the Fish Passage web site for contact information at: <https://wdfw.wa.gov/species-habitats/habitat-recovery/fish-passage/about>

### Disclaimers:

- Data presented here represent a snapshot observation of conditions in a dynamic environment that is subject to change. Fish passage data are also collected from a variety of agencies and sources. Therefore, WDFW makes no guarantee concerning the data's content, accuracy, completeness, or the results obtained from use of the data. WDFW assumes no liability for the data represented here.
- These data are not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife.
- Note that some fish passage features, habitats or species may occur in areas not currently known to the WDFW Fish Passage division, and may not be reflected in this database. A lack of data does not necessarily indicate that a feature, habitat, or species are not present.
- Unauthorized attempts to alter or modify these data are strictly prohibited.
- Bankfull width measurements included in these reports should not be used for fish passage crossing design. They are solely for assessment purposes.
- The barrier status reported in this document is based on the swimming abilities of adult salmonids. Passabilities are a qualitative value, and should not be interpreted as a quantitative calculation. Please see page 1-4 of the Fish Passage Inventory, Assessment and Prioritization Manual for further clarification: <https://wdfw.wa.gov/publications/02061>
- EXIF data presented with Image Reports may be erroneous due to camera battery failures and resetting of camera clock functions.

### Abbreviations:

Most abbreviations in this report are defined in the Quick Reference Tables of the Fish Passage Inventory, Assessment, and Prioritization Manual. Additional commonly used abbreviations are defined as follows:

**NFB** = no potential salmonid use, **BB** = both banks, **LB** = left bank looking downstream, **RB** = right bank looking downstream, **US** or **U/S** = upstream, **DS** or **D/S** = downstream, **WSDrop** = water surface drop, **BFW** = bankfull width, **OHW** = ordinary high water, **SLW** = scour line width, **CMP** = corrugated metal pipe, **Q<sub>fp</sub>** = fish passage flow, **V&D** = Velocity and Depth, **ROW** = Right of Way

The FPDSI database often uses default values such as '-99.99' or '-999' to represent null values.

## WDFW Fish Passage and Diversion Screening Inventory Database

### Site Description Report

Site ID

Project

☐ Mitigated

#### Geographic Coordinates

Latitude (WGS 84):	<input type="text" value="48.227199"/>
Longitude (WGS 84):	<input type="text" value="-122.228295"/>
East (NAD 83 HARN):	<input type="text" value="1,219,029.4"/>
North (NAD 83 HARN):	<input type="text" value="1,060,092.4"/>

#### Waterbody

Stream:	<input type="text" value="Secret Cr"/>
Tributary To:	<input type="text" value="Pilchuck Cr"/>
WRIA:	<input type="text" value="05.0065"/>
River Mile:	<input type="text" value="0.89"/>
Fish Use Potential:	<input type="text" value="Yes"/>
FUP Criteria:	<input type="text" value="Biological"/>

#### General Location

Road Name:	<input type="text" value="I-5; SB"/>
Mile Post:	<input type="text" value="211.70"/>
County:	<input type="text" value="Snohomish"/>
WDFW Region:	<input type="text" value="4"/>

#### Owner

Type:	<input type="text" value="State"/>
Name:	<input type="text" value="Washington State Department of Transportation"/>

#### PI Species

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Sockeye         | <input type="checkbox"/> Chinook              | <input checked="" type="checkbox"/> Sea Run Cutthroat |
| <input type="checkbox"/> Pink            | <input checked="" type="checkbox"/> Coho      | <input checked="" type="checkbox"/> Resident Trout    |
| <input checked="" type="checkbox"/> Chum | <input checked="" type="checkbox"/> Steelhead | <input type="checkbox"/> Bull Trout                   |

#### Associated Features

- |   |                                |  |                                    |
|---|--------------------------------|--|------------------------------------|
| <input checked="" type="checkbox"/> Culvert | <input type="checkbox"/> Dam   | <input type="checkbox"/> Natural Barrier | <input type="checkbox"/> Diversion |
| <input type="checkbox"/> Non-Culvert Xing   | <input type="checkbox"/> Other | <input type="checkbox"/> Fishway         |                                    |

#### Location/Directions

This is the I-5 southbound lane site. Access can be gained from Old Hwy. 99, 1.2 miles south of SR 532.

#### Site Comments

Locally known as Secret Cr. Passes under Old Hwy 99, also. Fish observed by previous survey crew.

2/22/2022

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# WDFW Fish Passage and Diversion Screening Inventory Database

## Level A Culvert Assessment Report

Site ID: <b>990623</b>	Stream: <b>Secret Cr</b>	WRIA: <b>05.0065</b>
Latitude: <b>48.227199</b>	Tributary To: <b>Pilchuck Cr</b>	Fish Use Potential: <b>Yes</b>
Longitude: <b>-122.228295</b>		

Data Source: <input type="text" value="Washington Department of Fish and Wildlife"/>
Field Crew: <input type="text" value="Fredley;Moore"/> Review Date: <input type="text" value="4/17/2018"/>

Culvert Details										Level A Parameters			
ID	Shape	Material	Span	Rise	Length	WDIC	Apron	WSDrop	Location	Countersunk	Backwater	Slope (%)	Sediment
1.1	BOX	CPC	1.53	2.15	117.60	1.10	BE	0.20	Inlet	No	No	0.71	

All dimensions in meters

<b>Channel Description</b>	
Toe Width (m):	<input type="text" value="2"/>
Average Width (m):	<input type="text" value="5.60"/>
Culvert/Stream Width Ratio:	<input type="text" value="0.27"/>
<b>Plunge Pool</b>	
Length (m):	<input type="text" value="0.00"/>
Max Depth (m):	<input type="text" value="-99.99"/>
OHW Width (m):	<input type="text" value="-999.99"/>
<b>Road</b>	
Fill Depth (m):	<input type="text" value="8.00"/>



<b>Assessment Results</b>		Tidal Influence: <input type="text"/>	Tidegate Present: <input type="text" value="No"/>
Barrier: <input type="text" value="Yes"/>	Passability (%): <input type="text" value="67"/>	Method: <input type="text" value="Level B"/>	
Reason: <input type="text" value="Velocity"/>	Fishway Present: <input type="text" value="No"/>	Recheck: <input type="text"/>	

<b>Comments</b>
This is the southbound lane culvert. Culverted under both the south bound lanes of I-5 and Old Hwy 99. Thin layer of bed material at outlet. Wing walls at DS end. No bed material at US end. [Lvl B, Fredley, FishXing, 5/1/18].

<b>Potential Habitat Gain</b>			
Survey Type: <input type="text" value="PS4"/>	Spawning (sq m): <input type="text" value="4,426"/>	Length (m): <input type="text" value="7,376"/>	
Significant Reach: <input type="text" value="Yes"/>	Rearing (sq m): <input type="text" value="16,511"/>	<b>PI Total</b> <input type="text" value="20.75"/>	

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# WDFW Fish Passage and Diversion Screening Inventory Database

## Level B Culvert Assessment Report

Site ID:

### Reference Point

Elevation (m):  Location:

### Drainage Basin

Basin Area (sq mi):  Basin Precipitation (in):

### Culvert Elevations

Culvert ID	Corrugation	USIE (m)	USCBE (m)	DSIE (m)	DSCBE (m)	Sediment
<input type="text" value="1.1"/>	<input type="text" value="Concrete"/>	<input type="text" value="100.00"/>	<input type="text" value="-999.99"/>	<input type="text" value="99.19"/>	<input type="text" value="99.31"/>	<input type="text"/>

### Downstream Control

#### X-Section

Station	Top LB	Toe LB	Bed 1	Bed 2	Bed 3	Toe RB	Top RB
Distance (m)	<input type="text" value="0.00"/>	<input type="text" value="0.95"/>	<input type="text" value="1.65"/>	<input type="text" value="2.15"/>	<input type="text" value="2.85"/>	<input type="text" value="3.70"/>	<input type="text" value="4.85"/>
Elevation (m)	<input type="text" value="100.61"/>	<input type="text" value="99.96"/>	<input type="text" value="99.88"/>	<input type="text" value="99.86"/>	<input type="text" value="99.86"/>	<input type="text" value="99.95"/>	<input type="text" value="100.40"/>
Substrate	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Downstream Control Water Surface Elevation (m):

Downstream Control OHW Surface Elevation (m):

### Downstream of Control

Water Surface Elevation (m):  Channel Dominant Substrate:

Distance Downstream (m):

### Results

Velocity (m/sec):  Depth (m):

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## WDFW Fish Passage and Diversion Screening Inventory Database

### Habitat Survey Summary Report

Site ID: **990623**

Latitude: **48.227199** Longitude: **-122.228295** WRIA: **05.0065**

Stream: **Secret Cr** Tributary To: **Pilchuck Cr** PI Total: **20.75**

Survey Type

Spreadsheet File(s):

See WSDOT site 990622 for survey files.

#### Downstream Survey

Date:  Crew:  Length (m):

Downstream Comments:

1-2% gradients measured through wide open channel filled with cobbles, gravels, and fines. No natural barriers observed down to Pilchuck Cr. Numerous log streambed controls placed in channel below sites.

#### Upstream Survey

Date:  Crew:  Length (m):

Upstream Comments:

Primarily forested habitat with low gradient. Sections of Secret Cr were walked up to culvert under Hwy 532. Great spawning and rearing habitat US. (PS4 completed on 990622 by Cooke;Pahutski 4/30/1997)

#### Potential Habitat Gain

Lineal (m):

Spawning Area (sq m):

Rearing Area (sq m):

Distribution

- ☒ Anadromous  
☐ Resident Only  
☐ Unknown

Gain Direction (Resident Only):

#### Potential Species Benefit

☐ Sockeye / Kokanee

☐ Pink

☒ Chum

☐ Chinook

☒ Coho

☒ Steelhead

☒ Searun Cutthroat

☒ Resident Trout

☐ Bull Trout

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# WDFW Fish Passage and Diversion Screening Inventory Database

## Barrier Priority Index Report

Site ID: 990623

Stream	Secret Cr	Trib To	Pilchuck Cr	WRIA	05.0065
Habitat (H) Estimation Method			PS4		

	B	H	M	D	C	Species PI
Sockeye			2		1	0.00
Pink			2		1	0.00
Chum	0.33	4,216	2	1	1	7.68
Coho	0.33	16,284	2	2	1	5.73
Chinook			2		1	0.00
Steelhead	0.33	16,214	2	3	1	2.87
Searun Cutthroat	0.33	16,368	2	1	1	4.47
Resident Trout			1		1	0.00
Dolly/Bull Trout					1	0.00
TOTAL PI						20.75

B = proportion of fish passage improvement (1, 0.67, 0.33).

H = potential habitat gain (square meters), spawning habitat for sockeye, pink and chum, rearing habitat for the rest.

M= mobility modifier (anadromous = 2, resident = 1).

D = stock condition modifier (critical = 3, depressed = 2, not 2 or 3 = 1).

C= repair cost modifier (<\$100K = 3, \$100K - \$500K = 2, >\$500K = 1).

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# WDFW Fish Passage and Diversion Screening Inventory Database

## Image Report - Active

Site ID: **990623**

Latitude: **48.227199**

Longitude: **-122.228295**

Stream: **Secret Cr**

Tributary To: **Pilchuck Cr**

WRIA: **05.0065**

Fish Use Potential: **Yes**

### Associated Features

☒ Culvert

☐ Dam

☐ Natural Barrier

☐ Diversion

☐ Non-Culvert Xing

☐ Other

☐ Fishway



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